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09/767,413	01/23/2001	Cynthia L. Cassel	887	2467

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EXAMINER
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PHAM, TOAN NGOC

ART UNIT	PAPER NUMBER
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2632

DATE MAILED: 02/13/2006

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/767,413  
Filing Date: January 23, 2001  
Appellant(s): CASSEL ET AL.

**MAILED**  
**FEB 13 2006**  
**GROUP 2600**

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John D. Gugliotta  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 24, 2005 appealing from the Office action mailed January 7, 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

This rejection was previously reversed in Appeal No. 202-1893 on March 4, 2004 by Administrative Patent Judges Hairston, Krass and Blankenship. Appellant feels that the present issues have already been decided and that this previous decision is controlling. There are no other appeals or interferences known to appellant, appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

4,696,307	MONTGIEUX	9-1987
5,928,157	O'DWYER	07-1999
6,011,477	TEODORESCU ET AL.	01-2000
4,862,144	TAO	08-1989

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (4,696,307).

Regarding claim 1: Montgieux discloses a breathing detection device and alarm comprising an attachable transmitter placed inside the box (1) and attached to an abdominal belt (29), that is elastic; the transmitter is connected with a portable receiver carried by the person monitoring the child. Montgieux does not use the term "pliable chest strap of a soft and formable material"; however, the elastic strap as disclosed by Montgieux is obviously soft and formable, since the strap is wrapped around the contour

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body of the child and elasticity is expanded to form fit the child's body (col. 4, lines 39-66). Although Montgieux discloses wrapping the monitoring device around the abdominal of the child; thus, whether the breathing monitor is wrapped around the chest or the abdominal is merely one's preference to monitor the breathing movement; since both areas moves when a person breathes.

Regarding claim 2: Montgieux discloses the transmitter housing comprises fasteners to allow for the strap to be connected in a manner circumscribing the wearers (Figs. 1-4). Although Montgieux discloses wrapping the monitoring device around the abdominal of the child; thus, whether the breathing monitor is wrapped around the chest or the abdominal is merely one's preference to monitor the breathing movement; since both areas moves when a person breathes.

Regarding claim 4: Montgieux discloses a breathing detection device and alarm comprising an attachable transmitter placed inside the box (1) and attached to an abdominal belt (29), that is elastic; the transmitter is wirelessly in communication with a portable receiver carried by the person monitoring the child (col. 3, lines 1-3).

Claims 3, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (US 4,696,307) in view of Teodorescu et al. (US 6,011,477) (of record).

Regarding claim 3: Montgieux does not disclose the sensors including a first and second resonant sensor and including a microphone housed with the chest strap. Teodorescu et al. discloses a respiration and movement monitoring system including a resonant sensor (50) and may be used interchangeably with first sensor (12) and

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second sensor (18) to monitor the respiration and movements of an infant (14) (col. 3, lines 55-61; col. 4, lines 34-54). Teodorescu et al. also discloses an audio detector unit (24) detects, filters, and amplifies audio signals produced proximal to support platform (16) by, for example, a voice or sound associated with an infant (14) (col. 4, lines 8-11). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize resonant sensors to monitored the respiration and movement activities of the infant as taught by Teodorescu et al. in a system as disclosed by Montgieux for providing an effective fail-safe monitoring system.

Regarding claim 6: Montgieux does not disclose the antenna associated with the transmitter unit; however, transmitter and receiver including antennas for communication are well known in the art of wireless communication. Teodorescu et al. discloses the transmitter circuitry has a transmitter controller (26) communicating with an antenna and an audio detector unit (24), which is obviously a microphone for communicating the alarm signal to the remote station (30) (col. 4, lines 8-28).

Regarding claim 7: Montgieux discloses receiver technology, but does not disclose the digital-to-analog speaker amplification circuit; however, it is well known that the wireless transmitted signals are digital and it is being received as a digital signal until it is converted back to an analog signal and amplified and output to the speaker.

Regarding claim 8: Montgieux discloses the sensor box incorporate a transmitter for transmitting the alarm signal to a portable receiver carried by the person monitoring the child (col. 3, lines 1-3).

Regarding claim 9: Teodorescu et al. discloses the respiration monitor includes a first (12) and second (14) sensor and a resonant sensor (50) may be used interchangeably with the first and second sensor to monitor the respiration and movement of the infant (col. 3, lines 55-61; col. 4, lines 34-54).

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (US 4,696,307) in view of Teodorescu et al. (US 6,011,477) (of record) as applied to claim 1 above and further in view of O'Dwyer (US 5,928,157) (of record).

Regarding claim 10: Montgieux in view of Teodorescu et al. does not disclose a comparator for comparing respiratory signal pattern. O'Dwyer discloses the respiration monitor comprises a comparator (103) that compares the respiration related signal patterns to a stored pattern, and monitors the heart rate or pulse as compared with an initial baseline measurement (col. 4, lines 6-31). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a comparator as taught by O'Dwyer in an infant respiratory monitoring system as disclosed by Montgieux in view of Teodorescu et al. for providing an effective respiration monitoring system that is only responsive to a real and true respiration alarm signal.

Regarding claim 11: O'Dwyer discloses the respiration monitor comprises a comparator (103) circuit that determines if either of the measured characteristic falls below an alarm point, and generates an alarm output impulse that communicates with the radio frequency transmitter (105), forming a synthesized signal that communicating with an antenna is well known in the art, and results in an alarm of a predetermined

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frequency for audible transmission through the speaker (60) of the receiver (58, 111, 115, 119) (col. 4, lines 6-31).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgieux (US 4,696,307) in view of Tao (US 4,862,144) (of record). Montgieux does not disclose a receiver comprises a light means. Tao discloses a receiver comprises a light means (42) for providing a visible alarm notification (col. 7, lines 34-36). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a light means in the receiver as taught by Tao in a system as disclosed by Montgieux for providing a visible alarm indication that is noticeable to the care taker.

### ***Response to Arguments***

Appellant's arguments filed on August 24, 2005 have been fully considered but they are not persuasive. Because,

#### **Appellant's arguments:**

A) Montgieux fail to teach a pliable chest strap of a soft and formable material being easily wrapable about the chest of an infant. In contrast, Montgieux teaches a rigid element connected to a stiff, movable strap.

B) Montgieux fails to teach a first resonant sensor for detecting respiration and movement of the infant and a second resonant sensor spaced laterally apart from the first resonant sensor for detecting heart rate pulse.

C) Montgieux fails to teach a receiver comprising a lighting means.



Response to Arguments:

A) Montgieux does not use the term “pliable chest strap of a soft and formable material”; however, the elastic strap as disclosed by Montgieux is obviously soft and formable, since the strap is wrapped around the contour body of the child and elasticity is expanded to form fit the child's body (col. 4, lines 39-66). Montgieux discloses the elastic strap; therefore, it is very formable when attached to the infant. Appellant appears to disagree that the elastic trap of Montgieux is not soft. One of ordinary skill in the art would recognize that any material made for infants are soft. Thus, the elastic strap of Montgieux is soft in order to elastically expand and contract with the breathing motion of the infant. One of ordinary skill in the art could arguably ask, how soft is “soft”? The softness of a material really depends from person to person.

B) Montgieux does not disclose the sensors including a first and second resonant sensor and including a microphone housed with the chest strap. Teodorescu et al. discloses a respiration and movement monitoring system including a resonant sensor (50) and may be used interchangeably with first sensor (12) and second sensor (18) to monitor the respiration and movements of an infant (14) (col. 3, lines 55-61; col. 4, lines 34-54). Teodorescu et al. also discloses an audio detector unit (24) detects, filters, and amplifies audio signals produced proximal to support platform (16) by, for example, a voice or sound associated with an infant (14) (col. 4, lines 8-11). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to utilize resonant sensors to monitored the respiration and movement activities of the

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infant as taught by Teodorescu et al. in a system as disclosed by Montgieux for providing an effective fail-safe monitoring system.

C) Montgieux does not disclose a receiver comprises a light means. Tao discloses a receiver comprises a light means (42) for providing a visible alarm notification (col. 7, lines 34-36). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a light means in the receiver as taught by Tao in a system as disclosed by Montgieux for providing a visible alarm indication that is noticeable and eye-catching to the care taker.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan N. Pham whose telephone number is (571) 272-2967. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Toan N. Pham


 **TOAN N. PHAM**  
**PRIMARY EXAMINER**

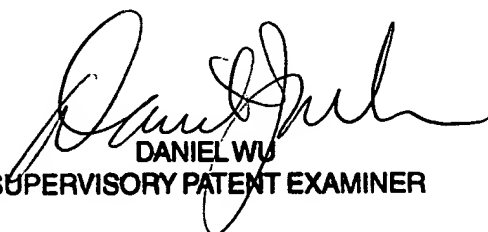
February 2, 2006

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